

**Average Prices Received by North Dakota Farmers
August 15, 1943, with Comparisons¹**

Commodity	Average Prices				Price Relatives ²		
	1943		1942	1910-14	1943		1942
	Aug.	July	Aug.	Average	Aug.	July	Aug.
Wheat, bu.....	1.19	1.20	.89	.86	138	140	103
Flaxseed, bu.....	2.74	2.78	2.19	1.71	160	163	128
Oats, bu.....	.53	.56	.32	.35	151	160	91
Barley, bu.....	.86	.87	.49	.54	159	161	91
Rye, bu.....	.73	.83	.38	.60	122	138	63
Potatoes, bu.....	1.30	1.30	1.00	.64	203	203	156
Beef cattle, cwt.....	11.80	12.00	10.60	4.68	252	256	226
Hogs, cwt.....	12.80	12.60	13.00	6.77	189	186	192
Sheep, cwt.....	6.10	6.30	5.30	4.51	135	140	118
Lambs, cwt.....	12.40	12.80	11.90	5.65	219	227	211
Wool, lb.....	.43	.43	.37	.16	269	269	231
Butterfat, lb.....	.48	.48	.40	.26	185	185	154
Chickens, lb.....	.203	.20	.16	.10	203	200	160
Eggs, doz.....	.329	.322	.27	.21	157	153	129

¹Average prices reported to Agricultural Marketing Service on the fifteenth of the month.

²Relation of current prices of each commodity to the average price of each commodity during the base period, August 1909 to July 1914.

Indices of North Dakota Agriculture¹

	1943		1942
	August	July	August
North Dakota farm price index ²	159	161	126
U. S. farm price index.....	193	188	163
U. S. index of prices paid by farmers.....	165	165	152
Purchasing power of N. Dak. farm products ³	96	98	83

¹August 1909—July 1914=100.

²Calculated by weighted aggregative method on the basis of the 14 commodities.

³Ratio of North Dakota prices received to United States prices paid by farmers.

Reviews

Tomato Diseases

BECAUSE of the severe injury to tomato plants by disease in both 1942 and 1943 North Dakota gardeners should be interested in Farmers' Bulletin No. 1934, United States Department of Agriculture on "Tomato Diseases" by S.P. Doolittle, senior pathologist, Division of Fruit and Vegetable Crops and Diseases, Bureau of Plant Industry, Soils, and Agricultural Engineering, Agricultural Research Administration, United States Department of Agriculture. It can be secured by sending 15 cents to the Superintendent of Documents, United States Government Printing Office, Washington, D. C.

This 83-page bulletin contains a systematic key enabling the grower to identify tomato diseases in the field and in the greenhouse, and

nearly fifty splendid illustrations showing different types of diseases.

Of especial interest to North Dakota growers is the section on

septoria leaf spot, or septoria blight, one of the diseases which has caused such extensive destruction of leaves often to the extent of complete defoliation this year. This disease is particularly active in wet weather and when temperatures range from 60° to 80° F. Suggested control measures include complete destruction of all tomato plant residues this fall and deep fall or deep spring plowing, and avoidance of returning tomatoes to infected portions of the field or garden for several years. This sanitary precaution is not enough however, hence systematic use of copper sprays or dusts are advised. Directions are given for making a Bordeaux mixture for spraying and for use of copper dusts.

Other diseases of special interest to North Dakota gardeners are the

two physiological troubles, sunscald and growth cracks. Growth cracks are common during periods of abundant rain and high temperatures and unfortunately little control seems possible. Sunscald injury is brought about by the loss of leaves as, for example, by septoria leaf spot. Blossom-end rot frequently occurs in the drier seasons, but sometimes after periods of unusually abundant rainfall. Excessive rainfall which leads to rootlet destruction because of lack of air in the soil, or the activity of rot fungi may produce a condition whereby the plant is unable to secure water even though the soil is moist. This reviewer urges that all those who are interested in tomatoes send for a copy of "Tomato Diseases."

H. L. Walster.

New Facts About Russian Thistle

NO PLANT, regardless of how humble and common it is, is unworthy of study. The North Dakota Agricultural Experiment Station has just released its Bulletin 326 on the life history and growth of the Russian thistle. Professor O. A. Stevens, associate botanist at the Station, long a careful student of weeds, tells us that Russian thistle was first observed in America in Bon Homme county, South Dakota, in 1873, just 70 years ago. 1943 might well be called the Three Score and Tenth Anniversary of the invasion of this weed. Even 20 years after its invasion (i.e. by 1893) it had not yet gained much headway in North Dakota but the farseeing J. H. Worst, formerly President of the North Dakota Agricultural College, then a farmer in Emmons county, warned the public that means should be taken to suppress the weed.

Professor Stevens tells us about the development of the spines and seeds of this "Russian cactus" as it was once called. He finds that under usual conditions the seed germinates about the last of April but some seeds may start in even late June. Flowering begins soon after July but it is about a month before these single-seeded flowers "set" seed. The capacity of a single Russian thistle plant to produce seed is enormous. A single plant harvested in 1938 provided 19,152

seeds. Russian thistle seed analyzed in the department of Agricultural Chemistry by T. H. Hopper, formerly Station Chemist, contained from 14.8 percent to 18.3 percent ether extract, which material was presumably mostly oil. This oil had an iodine number of from 134 to 140, hence it could not be considered a drying oil.

A free copy of Bulletin 326 may be obtained from the Information Department, State College Station, Fargo, North Dakota. (H. L. W.)